

## **The Labor Force Absorption Improvement of Micro and Small Enterprises (MSEs) in Indonesia**

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### **Abstract**

The aims to determine steps to increase the labor force absorption of the Micro and Small Enterprises (MSEs) sector. This research using the structural equation model partial least square (SEM-PLS) method with cross-section secondary data within provinces (34 provinces) from the 2016 Economic Census (2017 census). The analysis results showed that the labor force absorption of MSEs in Indonesia was directly and positively affected by the number of MSEs and the income of MSEs. The number of MSEs in Indonesia was positively affected by the education level of MSEs owners. Meanwhile, the income of MSEs was positively affected by the use of the internet (digital technology) of MSEs. The education level of MSE owners was the only factor that had an indirect positive effect on the labor force absorption of MSEs. Increasing the labor force absorption of MSEs in Indonesia can be promoted by strengthening the entrepreneurship curriculum to foster an entrepreneurial spirit in students, especially at the higher education level, to grow the startup businesses. In addition, digital marketing partnerships with various e-commerce platforms providing marketplaces and online courier service platforms to increase MSEs income are encouraged.

**Keywords:** Entrepreneurship Education, Startup Business, Marketplace  
**JEL Classification:** J23, M20, O17

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### **INTRODUCTION**

The positive trend in the growth of the Indonesian labor force is an opportunity, as well as a challenge for realizing Indonesia's economic development. The growth of the labor force is a major asset for economic development, but on the other hand, it becomes a challenge in line with the increasing demand for employment. Unemployment is a fundamental problem of the country's economy. The momentum of growth in the Indonesian labor force must be balanced with employment growth (Allen, 2016; Hasibuan, 2017; Nomaan & Nayantara, 2018; Rayhan & Yanto, 2020; Statistics Indonesia, 2019).

Micro and Small Enterprises (MSEs) is an economic sector that provides answers to job opportunities. The characteristics of MSEs that are driven mainly through the middle to lower-class groups are an alternative to encourage equitable development. MSEs are also scattered in each region, with an average percentage of more than 98% of the total number of non-agricultural enterprises and absorbing more than a third of the labor force.

MSEs play an essential role in sustainable economic development to Golden Indonesia 2045 in terms of the number of businesses, job creation, national economic growth, and creating added value for goods and services (Lubis & Saputra, 2015; Ministry of National Development Planning/Bappenas, 2017; Statistics Indonesia, 2019; Tambunan, 2019). However, MSEs are currently facing the threat of a decline in income due to economic slowdown from the impact of the Covid-19 pandemic. Furthermore, the impact of the economic slowdown has also led to an increase in the unemployment rate (UNDP & LPEM FEB UI, 2021; Hasibuan, 2017; Kiram et al., 2020).

The question of Indonesia's economic development should refer to efforts for developing MSEs to create jobs. MSEs absorb an average of two workers for each unit (Statistics Indonesia, 2019). The potential for employment can still be developed. Efforts to develop MSEs align with efforts to realize the ideals of golden Indonesian economic development in 2045. This study aims to determine steps that can be implemented to increase the labor force absorption in the MSE sector in Indonesia. Various factors possibly affect MSEs labor force absorption, such as MSEs income, source of capital, labor wages, demographics, partnership, and technology (Aziz & Wicaksono, 2016; Junaedi, 2018; Radianto & Santoso, 2017; Statistics Indonesia, 2019). This step will further encourage economic development with job creation and reducing unemployment (Hasibuan, 2017; Ministry of National Development Planning/Bappenas, 2017).

## **METHOD**

### **Site and Time Research**

This study aimed to determine steps to increase the labor force absorption in the MSEs sector through a quantitative approach by estimating the factors that affect the MSEs' labor force absorption. This study was conducted in November 2020 using cross-section secondary data within provinces (34 provinces) from the 2016 Economic Census (2017 census).

### **Design Research**

Estimation was performed by using the structural equation model partial least square (SEM-PLS) method based on the conceptual framework. There was a direct and/or indirect relationship of each research variable that affects the labor force absorption of the MSEs sector. These relationships form the conceptual framework of the study (depicted in Figure 1) and are the basis for the research hypothesis.

### **Data Analysis**

The SEM-PLS analysis was performed in two stages. The first stage was model evaluation, consisting of the measurement model analysis (outer model) and the structural model (inner model) with the indicators and criteria in Table 1. The second stage was model interpretation, i.e., the hypothesis testing (with  $\alpha = 10\%$ ) on the direct and indirect effect using the t-test with bootstrapping that provided in Table 2. (Jaya & Sumertajaya, 2008; Ngah et al., 2018; Nurwulan et al., 2015). The scope of the research was limited to the MSEs sector (non-sectoral) with the method specified and the availability of data used.

The conclusions of the research results are in line with the research objectives and methods that were determined. The research did not provide conclusions beyond the objectives and research methods that had been established. However, the arguments in the discussion of research results are based on theoretical and empirical studies.

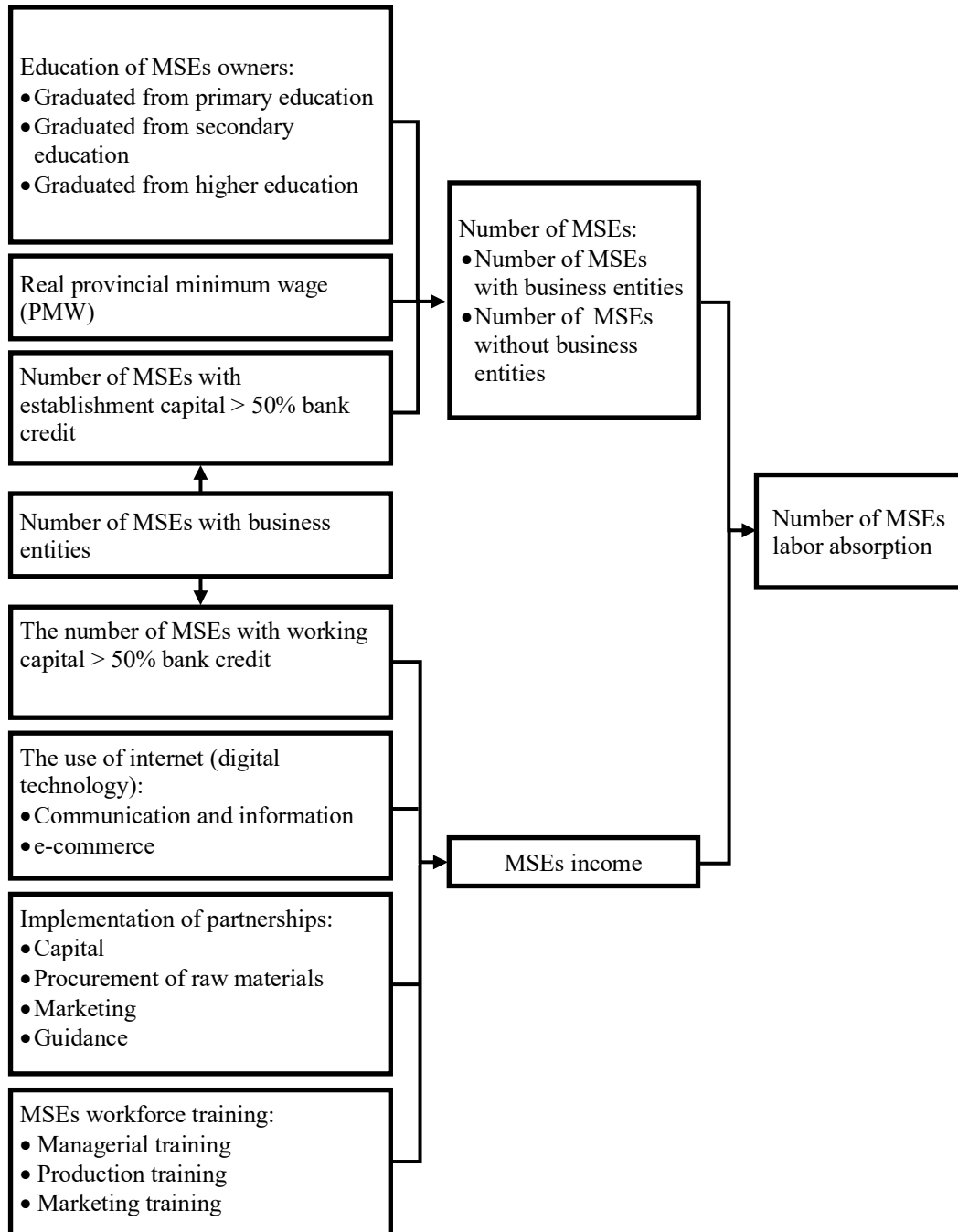


Figure 1. Conceptual framework

Table 1. Model evaluation indicators and criteria

<b>Model evaluation</b>	<b>Indicator and criteria</b>	<b>Objective</b>
Outer model	1. Convergent validity; loading factor value > 0.7	To determine whether an indicator variable forms a latent variable
	2. Discriminant validity; cross loading factor on the latent variable is the largest	To demonstrate that the indicator variable can explain the latent variable well
	3. Internal consistency; composite reliability and cronbach's alpha value > 0.7	To demonstrate that the indicator variables in the model are reliable
Inner model	1. The coefficient of determination $R^2$ • $R^2 > 0.67$ : good • $0.33 < R^2 < 0.67$ : moderate • $R^2 < 0.33$ : weak	To demonstrate the feasibility of a model
	2. Prediction relevance ( $Q^2$ ); value $Q^2 > 0$ $Q^2 = 1 - (1 - R^2_1)(1 - R^2_n)$	To demonstrate that exogenous variables can predict endogenous variables

Source: Aurizella (2017); Nabila (2018); Ningsih (2019)

Table 2. Hypothesis testing criteria

<b>Direction of effect</b>	<b>Hypothesis</b>	<b>Criteria</b>
Direct effect	• Exogenous latent to exogenous latent	Prob. (t-stat) < $\alpha$ : exo/endogenous variables are significant
	• Exogenous latent to endogenous latent	Prob. (t-stat) > $\alpha$ : exo/endogenous variables are not significant
	• Endogenous latent to endogenous latent	
Indirect effect	• Exogenous latent to endogenous latent	Prob. (t-stat) < $\alpha$ : exo/endogenous variables are significant
	• Endogenous latent to endogenous latent	Prob. (t-stat) > $\alpha$ : exo/endogenous variables are not significant

Note:  $\alpha = 10\%$

## RESULTS AND DISCUSSION

### Model Evaluation and Interpretation

The model evaluation results showed that the overall research model was good. After the estimation, the evaluation results of the outer model showed that there was no need for modification of the model. The evaluation of convergent validity and discriminant validity showed that all indicators (manifest variables) formed the intended latent variable (the loading factor value is shown in Figure 2). Internal consistency evaluation also showed that all endogenous and exogenous latent variables were considered reliable (Cronbach's alpha and composite reliability values are shown in Table 3).

Results of the inner model evaluation showed that the model was considered suitable for use. All equations between endogenous and exogenous latent variables achieved good  $R^2$  and  $Q^2$  values greater than 0 (shown in Table 4). The variance of exogenous variables can predict the variance of endogenous variables well. Therefore, the model interpretation can be performed.

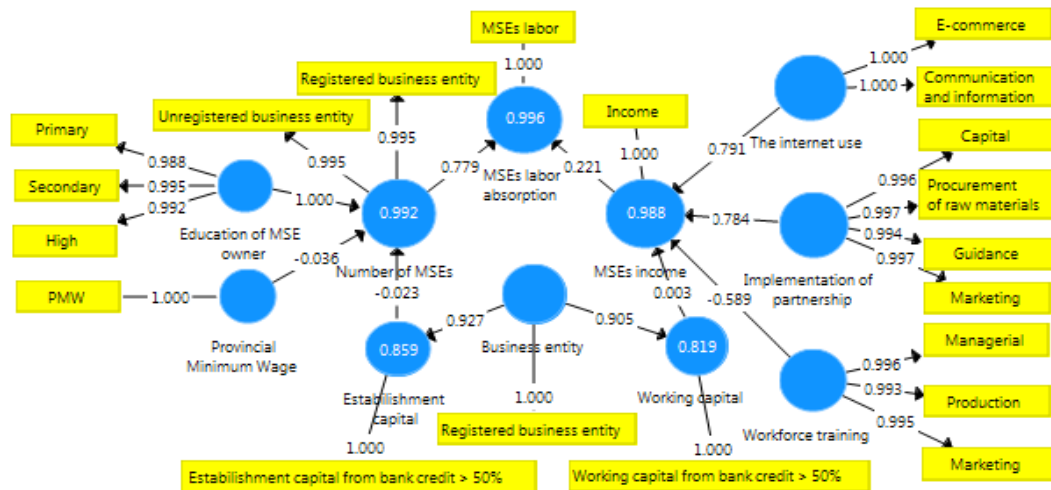


Figure 2. The loading factor and R<sup>2</sup> values from the model estimation results

Table 3. Results of the outer model internal consistency and inner model evaluation

Indicator	Criteria	Result		
1. Cronbach's alpha	> 0.7	MSEs labor absorption = 1.000 (reliable)		
		Number of MSEs = 0.990 (reliable)		
		MSEs income = 1.000 (reliable)		
		Education of MSEs owner = 0.992 (reliable)		
		Provincial minimum wage = 1.000 (reliable)		
		Establishment capital = 1.000 (reliable)		
		Working capital = 1.000 (reliable)		
		The internet use = 0.999 (reliable)		
		Partnership = 0.997 (reliable)		
		Workforce training = 0.994 (reliable)		
		Business entity = 1.000 (reliable)		
		2. Composite reliability	> 0.7	MSEs labor absorption = 1.000 (reliable)
				Number of MSEs = 0.995 (reliable)
MSEs income = 1.000 (reliable)				
Education of MSEs owner = 0.995 (reliable)				
Provincial minimum wage = 1.000 (reliable)				
Establishment capital = 1.000 (reliable)				
Working capital = 1.000 (reliable)				
The internet use = 1.000 (reliable)				
Partnership = 0.998 (reliable)				
Workforce training = 0.996 (reliable)				
Business entity = 1.000 (reliable)				

The model interpretation was based on hypothesis testing (with  $\alpha = 10\%$ ) on direct and indirect effects (Table 5). It is concluded that the number of MSEs and the income of MSEs significantly affected the labor force absorption of MSEs. Factors that significantly affected the number of MSEs were the education level of the MSEs owners, and factors that significantly affected MSEs income were the use of the internet (digital technology) by MSEs and the implementation of partnerships. Meanwhile, indirectly, the education level of the MSEs owners was the only factor that affected the number of labor force absorption in the MSEs

sector. In addition, the form of the MSEs business entity had a significant effect on the establishment capital and working capital of MSEs.

Table 4. Results of the inner model evaluation

Indicator	Criteria	Result
1. R <sup>2</sup>	<ul style="list-style-type: none"> <li>• R<sup>2</sup> &gt; 0.67 : good</li> <li>• 0,33 &lt; R<sup>2</sup> &lt; 0.67 : moderate</li> <li>• R<sup>2</sup> &lt; 0.33 : weak</li> </ul>	MSEs labor absorption = 0.996 (good) Number of MSEs = 0.992 (good) MSE income = 0.988 (good) Establishment capital = 0.859 (good) Working capital = 0.819 (good)
2. Q <sup>2</sup>	Q <sup>2</sup> > 0	Q <sup>2</sup> = 0.999 (good)

Table 5. Results of estimation and t-test of variables in the model

Direction of effect	Path diagram	Estimation parameters	t-stat.	Prob.
Direct effect	• Number of MSEs → MSEs labor absorption	0.779	5.974	0.000*
	• Income of MSEs → MSEs labor absorption	0.221	1.686	0.092*
	• Education of MSE owners → number of MSEs	1.000	13.760	0.000*
	• Provincial minimum wage (PMW) → number of MSEs	-0.036	0.970	0.332
	• Establishment capital > 50% bank credit → number of MSEs	-0.023	0.303	0.762
	• Working capital > 50% bank credit → MSE income	0.003	0.022	0.982
	• The internet use (digital technology) → MSE income	0.791	3.902	0.000*
	• Implementation of partnerships → MSE income	0.784	2.527	0.012*
	• MSE workforce training → MSE income	-0.589	1.467	0.143
	• MSE business entities → establishment capital > 50% bank credit	0.927	10.070	0.000*
	• MSE business entities → working capital > 50% bank credit	0.905	8.928	0.000*
Indirect effect	• Education of MSME owners → workforce	0.779	5.201	0.000*
	• Provincial minimum wage (UMP) → workforce	-0.028	1.072	0.284
	• Establishment capital > 50% bank credit → workforce	-0.018	0.326	0.745
	• Working capital > 50% bank credit → workforce	-0.001	0.016	0.987
	• The internet use (digital technology) → workforce	0.175	1.606	0.109
	• Implementation of partnerships → workforce	0.173	1.126	0.260
	• Training for MSEs workers → workforce	-0.130	0.833	0.405
	• MSE business entities → number of MSEs	0.021	0.300	0.765
	• MSE business entities → MSE income	0.002	0.023	0.982
	• MSE business entities → MSE workforce	-0.016	0.246	0.806

Note: \* significant at  $\alpha = 10\%$

### Factors Affecting the Number of MSEs in Indonesia

Micro and small enterprises (MSEs) are productive economic enterprises with a scale of micro and small businesses based on their wealth value. Based on the Law of the Republic of Indonesia Number 20 of 2008, the net worth of micro businesses is not more than IDR 50,000,000; while the net worth of small businesses is from more than IDR 50,000,000 to IDR 500,000,000 (excluding land and business buildings).

Table 6. Number and distribution of MSEs by region in Indonesia<sup>1</sup>

Region	Number of MSEs (unit)	Distribution of MSEs <sup>2</sup> (%)
Sumatra	4.858.476	18,63
Java	15.837.626	60,74
Bali and Nusa Tenggara	1.475.267	5,66
Kalimantan	1.337.344	5,13
Sulawesi	2.116.609	8,12
Maluku and Papua	448.367	1,72
Indonesia	24.367.078	100,00

Note : <sup>1</sup>Based on 2016 economic census

<sup>2</sup>Percentage of the number of MSEs per province by region on the total number of MSEs in Indonesia

Source : Statistics Indonesia (2019) (processed)

MSEs are spread all over Indonesia. However, more than 60% of the total MSEs are in Java (Table 6). Most MSEs in Indonesia do not have business entities, while the number of MSEs with a business entity was only 6.54% of the total MSEs in Indonesia. However, MSEs with and without business entities manifest the dynamics of Indonesian MSEs in a balanced manner (shown in Figure 2). The forms of MSEs in Indonesia include companies, CVs, business firms, cooperatives, foundations, special permits and foreign institutions (Statistics Indonesia, 2019). The analyses of the factors that affect the number of MSEs in Indonesia are discussed in the next sections.

### ***Education of MSE Owners***

The education of MSEs owners was the only variable that had a significant positive effect on the number of MSEs in Indonesia. MSEs are generally labor-intensive enterprises and do not require educational requirements for their establishment. It was recorded that 50.5% of MSEs in Indonesia are owned by the junior high school to senior high school/vocational school graduates. However, the study results showed that the number of MSEs in Indonesia increases with the increase in the education level of MSEs owners (Statistics Indonesia, 2019).

The results of this study also indicated that strengthening the entrepreneurship curriculum by the Ministry of Education and Culture of the Republic of Indonesia is the correct step. Strengthening the entrepreneurship curriculum is a strategy outlined in the Golden Indonesia 2045 Roadmap (Indonesian Ministry of Education and Culture, 2017). Fostering an entrepreneurial spirit in students through strengthening entrepreneurial curricula, especially at the higher education level, can encourage an increase in the number of MSEs in Indonesia (Permana, 2017).

Entrepreneurship education will give rise to start-up businesses which in the process then increase the number of MSEs in Indonesia. A Start-up business is a newly formed start-up with the definition referring to the age of the business. Start-up businesses have characteristics that are in line with the younger generation; generally they have brilliant ideas and a strong desire to develop (Radianto & Santoso, 2017; Salamzadeh & Kawamorita, 2015; Tambunan, 2019).

### ***The Amount of The Provincial Minimum Wage (PMW)***

The scope of employment from an economic perspective cannot be separated from the minimum wage policy. The determination of the minimum wage is an effort to protect the government for workers/labor as outlined and regulated in Law Number 13 of 2003 concerning Employment. Determination of the provincial minimum wage (PMW) based on the needs of a decent life and economic growth. Therefore, the value of the PMW also shows the difference in the spatial economy of a region (Carpio et al., 2015; Gunawan, 2018; Gunawan & Nuzula, 2020).

However, the size of the PMW does not affect the number of MSEs in Indonesia. In general, MSEs in Indonesia are businesses in the informal sector and do not have a business entity. MSEs, in general, also do not have the ability to provide wages in accordance with the minimum wage (Junaedi, 2018; Statistics Indonesia, 2019; Tambunan, 2019).

Spatial economic differences do not have a significant effect on the growth of MSEs in every region in Indonesia. The empirical results proved that MSEs is a sector that can be developed for economic equality without being affected by spatial economic conditions and realizing the equitable pillar of development for the golden Indonesia vision in 2045. Therefore, efforts to increase the number of MSEs should be able to be performed in all regions of Indonesia fairly and equitably, and not only focused on the central area of MSEs in Java Island.

### ***Large Source of Establishment Capital from Bank Credit***

The presence of a larger initial capital than bank credit had no significant effect on the growth in the number of MSEs. This refers to the number of MSEs with an establishment capital with more than 50% coming from bank credit. Most MSEs in Indonesia were founded with their own capital. Only 30.23% of the total MSEs in Indonesia accessed bank credit for the establishment capital, and only 2.02% of total MSEs in Indonesia with more than 50% of the MSEs establishment capital originating from bank credit (Statistics Indonesia, 2019).

Another important issue that needs to be considered is that the form of the MSEs business entity had a positive significant effect on the composition of the initial establishment capital from bank credits. However, more than 93% of MSEs in Indonesia were not business entities. The status of a business entity affected the accessibility of businesses to capital that is greater than that of banks. The problem of low credit acceptance and asymmetric information is a fundamental problem faced in the scope of MSEs business credit extension (Aziz & Wicaksono, 2016; International Labour Organization, 2019; Statistics Indonesia, 2019; Tambunan, 2018).

The empirical results showed that the establishment capital which was greater than bank credit did not have a significant effect on the growth in the number of MSEs. This result contradicts the vigorous provision of business credit to encourage the development of people's businesses in Indonesia. Therefore, it is necessary to evaluate and supervise the provision of capital credit to MSEs that have not yet been and/or are just running businesses.

### **Factors Affecting MSEs Income in Indonesia**

The income of MSEs in Indonesia reached an average of IDR 196 million each year (Table 7). Java Island is the region with the highest MSEs income



compared to other regions. It was recorded that 60.76% of MSE income in Indonesia came from MSEs in Java. Meanwhile, Kalimantan Island was the region with the highest average MSEs income compared to other regions (Statistics Indonesia, 2019). The analyses of the factors that affect the income of MSEs in Indonesia are discussed in the next sections.

Table 7. MSEs income by region in Indonesia<sup>1</sup>

Region	MSEs Income (IDR million)	MSEs Average Income (IDR million)
Sumatra	99,385,521	204.05
Java	3,103,123,150	195.93
Bali and Nusa Tenggara	254,398,532	172.44
Kalimantan	295,459,758	220.93
Sulawesi	360,183,045	170.17
Maluku and Papua	101,938,230	227.35
Indonesia	5,106,488,237	196.85

Note : <sup>1</sup>Based on 2016 economic census

Source : Statistics Indonesia (2019) (processed)

### ***The Use of the Internet (Digital Technology)***

The use of the internet (digital technology) is a variable that had a positive significant effect on the income of MSEs in Indonesia. The percentage of the internet use at MSEs was 15.47% for communication and information, and 8.26% for e-commerce. Overall, MSEs using the internet were only 9.76% of the total MSEs in Indonesia. This number is still insufficient. The level of education is one aspect that determines the adoption of digital technology for MSEs (Saleh & Hidayat, 2016; Statistics Indonesia, 2019).

The challenges of MSEs digitalization are infrastructure development and technology adaptation. The MSEs sector is a business sector with a fairly even distribution of income (shown in Table 7). However, technology infrastructure is not evenly distributed throughout Indonesia. Until 2018, there were at least 11.57% of villages in Indonesia with weak internet signals, and there were still 8.29% of villages in Indonesia that had not received an internet signal. The presence of digital technology encourages the transition of offline MSEs to online MSEs, especially after the impact of the Covid-19 pandemic (UNDP & LPEM FEB UI, 2021; Erlanitasari et al., 2019; Kiram et al., 2020; Pakpahan, 2020; Statistics Indonesia, 2019).

### ***Partnership Implementation***

The implementation of the MSE partnerships is a variable that has a positive significant effect on the income of MSEs in Indonesia. The concept of developing MSEs through a partnership program is contained and regulated in Law Number 20 of 2008 concerning Micro, Small and Medium Enterprises. Partnerships are not only limited to the form of guidance, but also the capital assistance, procurement of production inputs and marketing cooperation.

However, the number of MSEs implementing partnerships is still small at only 9.42% of the total MSEs in Indonesia (Statistics Indonesia, 2019). The development of MSE partnerships is also a solution for adapting digital technology, as well as a solution to increasing MSE income. Partnership implications can

increase business competence, information disclosure, business access and increase MSE income.

Encouraging digital marketing partnerships between MSEs and various digital platforms is a step that must be taken to increase MSE income in Indonesia. Partnerships can be made with e-commerce platforms for marketplace providers (Bukalapak, Tokopedia, Shopee, etc.) or online courier service platforms (online delivery services such as GoJek, Grab, etc.). This step is expected to increase the use of e-commerce platforms for MSEs evenly throughout Indonesia. Encouraging the transformation of MSEs into a digital ecosystem practically increases MSE market share, sales volume, and income, while in macro becomes a driving force for economic development (Capri, 2019; Febriyantoro & Arisandi, 2018; Vicario & Nawangpalupi, 2020).

### ***MSE Workforce Training***

Training for the MSE workforce did not affect the income of MSEs in Indonesia. Only 4.11% of the total MSEs in Indonesia enrolled their workers in training. This number is still classified as very small. Training for MSEs workers was generally training in the production aspect. Although workforce training did not affect the income of MSEs, it did not necessarily indicate that training for MSEs is not needed. Development of MSEs human resources needs to be improved. The limitations of formal education can be supported by training for MSEs, especially for labor. Training provides teaching, knowledge and job skills development includes managerial, production and marketing training (includes online marketing) for MSEs workers (Capri, 2019; Permana, 2017; Statistics Indonesia, 2019; Tambunan, 2019).

### ***Large Source of Working Capital from Bank Credit***

This study showed that large amounts of working capital (more than 50% of total capital) from bank credit did not affect MSEs' income. Most MSEs in Indonesia use their own capital to run their business. The number of MSEs in Indonesia that access bank credit to run their businesses reached 31.73%. However, only 1.63% of total MSEs in Indonesia, with a total working capital of more than 50%, came from bank credit (Statistics Indonesia, 2019).

The amount of capital certainly affects the income and development of MSEs. This shows the urgency of capital accessibility for the development of MSEs. The form of the MSE business entity had a significant positive effect on the working capital composition of bank credit. As previously explained, more than 93% of MSEs in Indonesia did not have business entities. This makes it difficult for MSEs to access capital facilities (Aziz & Wicaksono, 2016; International Labor Organization, 2019; Statistics Indonesia, 2019; Tambunan, 2018).

The results of the analysis should serve as an evaluation for the provision of business credit to encourage the development of people's businesses in Indonesia. Non-bank financial institution facilities such as cooperatives can be an alternative source of credit for MSE capital. 27.57% of MSEs in Indonesia accessed credit from Non-bank financial institutions such as cooperatives (Statistics Indonesia, 2019). Furthermore, credit and capital grants should not cover all costs or needs of MSEs (referring to both establishment and working capital). The credit ceiling and MSE capital grants can be given a maximum of 50% of the estimated financing

needs. As the criteria for the value of micro-business assets, the results of the analysis support the initial Micro credit ceiling policy of IDR 25,000,000, as well as the small businesses.

### **Factors Affecting the Labor Absorption of MSEs in Indonesia**

The number of MSEs and the income of MSEs are factors that had a direct positive and significant effect on the labor absorption of MSEs in Indonesia. Meanwhile indirectly, the education level of MSE owners is the only factor that had a positive and significant effect on the total labor absorption in the MSE sector.

As already mentioned, strengthening the entrepreneurship curriculum by the Ministry of Education and Culture of the Republic of Indonesia is the correct step. This study empirically strengthens education as an essential aspect in strengthening entrepreneurship. The level of education is the only factor that had a positive and significant indirect effect on the labor force absorption in the MSEs sector.

The MSEs sector is characterized as an economic sector which is mostly driven by the middle to lower class of society with primary and secondary education levels. Based on the results of the 2016 Economic Census, the average length of education for MSEs owners was nine years (see Table 8). However, this does not rule out the possibility that the MSEs sector in the next period will be driven by people with higher education.

Table 8. Number of MSEs and education level of MSE owners<sup>1</sup>

Region	Number of MSEs (business unit)	Distribution of education level <sup>2</sup> (%)			Average length of education (years)
		Primary	Middle	Higher	
Sumatra	4,858,476	29.32	60.13	10.56	9.48
Java	15,837,626	44.36	47.69	7.94	8.65
Bali and Nusa Tenggara	1,475,267	44.63	44.71	10.67	8.22
Kalimantan	1,337,344	36.29	53.61	10.11	9.10
Sulawesi	2,116,609	40.13	49.54	10.33	8.55
Maluku and Papua	448,367	29.81	58.74	11.45	9.62
Indonesia	24,367,078	40.56	50.50	8.95	9.02

Note : <sup>1</sup>Based on 2016 economic census

<sup>2</sup>Percentage of education level distribution of MSEs business owners by region; consisting of primary (not graduating and/or graduating from primary school/ equivalent), middle (graduating junior high school - senior high school/ equivalent), higher (graduating diploma - Doctorate).

Source : Statistics Indonesia (2019) (processed)

Strengthening the entrepreneurship curriculum is a strategy outlined in the Golden Indonesia 2045 Roadmap. The direction of entrepreneurship education policy is to increase the number of entrepreneurs (Indonesian Ministry of Education and Culture, 2017) to grow various startup businesses (Radianto & Santoso, 2017) that can provide employment. Steps that can be implemented to increase the number of MSEs and the labor force absorption of MSEs in Indonesia are to foster an entrepreneurial spirit, especially among students, through entrepreneurship education.

The income of MSEs is also a factor that has a direct positive effect on the labor force absorption in the MSE sector. Although there were no exogenous latent

variables that had an indirect effect on labor force absorption in the MSE sector, encouraging an increase in MSE income is absolutely necessary. This effort can be performed by encouraging digital marketing partnerships between MSEs and various e-commerce platforms that provide marketplaces and online courier service platforms. Digital technology is expected to encourage the transition of offline MSEs to online MSEs, especially after the impact of the Covid-19 pandemic (UNDP & LPEM FEB UI, 2021; Capri, 2019; Febriyantoro & Arisandi, 2018; Kiram et al., 2020).

## CONCLUSION

The labor force absorption of MSE in Indonesia was directly and positively affected by the number of MSEs and the income of MSEs. The number of MSEs in Indonesia was positively affected by the education level of MSE owners. Meanwhile, the income of MSEs was positively affected by the use of the internet (digital technology) of MSEs. The education level of MSE owners was the only factor that had an indirect positive effect on the labor force absorption of MSEs. The implications of education in increasing the labor force absorption of MSEs are linear conclusions and recommendations. Steps that can be implemented are fostering an entrepreneurial spirit in students through strengthening the entrepreneurial curriculum, especially at the higher education level. Therefore, it grows startup businesses, which in turn increases the number of MSEs and provides employment. Increasing MSE income is also absolutely necessary. Steps that can be taken are encouraging digital marketing partnerships between MSEs and various e-commerce platforms providing marketplaces and online courier service platforms. The presence of digital technology is expected to encourage the transition of offline MSEs to online MSEs, especially after the impact of the Covid-19 pandemic. Therefore, increasing the income of MSEs can increase the labor force absorption in the MSEs sector.

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